Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) A method of transmitting information ~~units or~~ packets from a plurality of queues into a single transmission medium, wherein the ~~units or~~ packets may have different sizes, the method comprising:

a bandwidth guaranteeing process transferring ~~units or~~ packets from one or more queues to the transmission medium in a manner so that each of those queues can obtain at least a predetermined bandwidth, and

a queuing process comprising the steps of:

1. assigning a priority ~~or quality~~ to each of the queues not using the bandwidth guaranteeing process;

2. defining, for each of the queues not using the bandwidth guaranteeing process, a variable, and

3. for the queues not using the bandwidth guaranteeing process, when no queues ~~transmit units or packets~~ using the bandwidth guaranteeing process transmit packets;

determining a first queue having a variable with a value fulfilling a predetermined criterion,

transmitting a packet ~~or unit~~ from the first queue to the transmission medium, and

determining a new value for the variable of the first queue, the new value ~~relating to~~ based on a mathematical operation using a previous value for the variable at a point in time prior to transmission of the packet ~~or unit~~ and a factor scaling ~~with/relating to~~ the priority ~~or quality~~ of the first queue multiplied with a factor relating to a size of the packet ~~or unit~~ transmitted from the first queue, ~~and/or a period of time used for~~

~~transmitting the packet or unit, where the mathematical operation brings~~ the new value ~~to, compared to the previous value,~~ not fulfill<u>ing</u> the predetermined criterion.

Claim 2. (Cancelled)

Claim 3. (Currently Amended) A method according to claim 1, w erein the step of transmitting the data packet ~~or unit~~ comprises transmitting the packet ~~or unit~~ in accordance with a periodic timing signal and wherein the step of determining the new value for the first queue comprises, during transmission and for each period of the timing signal, providing a new value for the variable by performing the predetermined mathematical operation on a previous variable value and a factor scaling with the priority ~~or quality~~ of the first queue.

Claim 4. (Cancelled)

Claim 5. (Cancelled)

Claim 6. (Original) A method according to claim 1, further comprising the step of determining a bandwidth used for at least one of the queues.

Claim 7. (Currently Amended) A method according to claim 6, further comprising the step of altering, on the basis of the bandwidth used by a queue, a parameter of the bandwidth guaranteeing process for the queue ~~and/or the priority/scaling of the step of determining a new value for the queue~~.

Claim 8. (Original) A method according to claim 6, further comprising the step of providing information to an operator of the bandwidth used.

Claim 9. (Original) A method according to claim 1, wherein the step of defining the variable comprises defining an integer value relating to a priority or quality of each queue.

Claim 10. (Currently Amended) An apparatus for transmitting information units or packets from a plurality of queues into a single transmission medium, wherein the units or packets may have different sizes, the apparatus comprising:

bandwidth guaranteeing means for transferring units ~~or packets~~ from one or more queues to the transmission medium in a manner so that each of those queues can obtain at least a predetermined bandwidth, and

queuing means comprising:

  1. means for assigning a priority ~~or quality~~ to each of the queues not using the bandwidth guaranteeing process,

  2. means for defining, for each of the queues not using the bandwidth guaranteeing process, a variable, and

  3. means for, when no queues ~~transmit units or packets~~ using the bandwidth guaranteeing process<u> transmit packets</u>;

determining a first queue having data and having a variable with a value fulfilling a predetermined criterion,

transmitting a packet ~~or unit~~ from the first queue to the transmission medium, and

determining a new value for the variable of the first queue, the new value relating to a mathematical operation using a previous value for the variable at a point in time prior to transmission of the packet ~~or unit~~ and a factor scaling ~~with/relating to~~ the priority <u>of</u> ~~or quality of~~ the first queue multiplied with a factor relating to a size of the packet ~~or unit~~ transmitted from the first queue, ~~and/or a period of time used for transmitting the packet or unit, where the mathematical operation brings~~ the new value ~~to, compared to the previous value,~~ not fulfil<u>ling</u> the predetermined criterion.

Claim 11. (Cancelled)

Claim 12. (Currently Amended) An apparatus according to claim 10, wherein the means for transmitting the data packet ~~or unit~~ comprises means for transmitting the packet ~~or unit~~ in accordance with a periodic timing signal and wherein the means for determining the new value for the first queue comprise means for, during transmission and for each period of the timing signal, providing a new value for the variable by performing the predetermined mathematical operation on a previous variable value and a factor scaling ~~with~~ the priority ~~or quality~~ of the first queue.

Claim 13. (Cancelled)

Claim 14. (Cancelled)

Claim 15. (Original) An apparatus according to claim 10, further comprising means f determining a bandwidth used for at least one of the queues.

Claim 16. (Currently Amended) An apparatus according to claim 15, further comprising means for altering, on the basis of the bandwidth used by a queue, a parameter of the bandwidth guaranteeing means for the queue ~~and/or the priority/scaling of the means for determining a new value for the queue~~.

Claim 17. (Original) An apparatus according to claim 15, further comprising means for providing information to an operator of the bandwidth used.

Claim 18. (Original) An apparatus according to claim 10, wherein the means for defining the variable comprises means for defining an integer value relating to a priority or quality of each queue.

Claim 19. (Cancelled).